PHYSIOLOGY OF THE EYE—Clinical Application—Third Edition. Francis Heed Adler, M.A., M.D., F.A.C.S., William F. Norris and George E. de Schweinitz, Professor of Ophthalmology, University of Pennsylvania School of Medicine; Consulting Surgeon, Wills Hospital, Philadelphia. The C. V. Mosby Company, St. Louis, Mo., 1959, 790 pages, \$16.00.

Adler's Physiology of the Eye was published in 1950, and since its first edition, has become the outstanding book on this field of ophthalmology. It has been stated that if a candidate for the American Board of Ophthalmology Examinations were to be limited to one volume for his preparation, it should be this book.

In the preface to the first edition Adler stated that if the ophthalmologist is to treat the diseases of the eye adequately, he must know how the various portions of the eye normally function. For example, in the treatment of glaucoma, it is necessary to understand the formation and elimination of the aqueous humor, the permeability characteristics of the cornea and the hydrodynamics of the ocular circulation. In his first edition he took the recent findings of the physiology of the eye as found in the experimental laboratory and applied these facts clinically. This general plan was used throughout the book and accounts for its immediate acceptance in this field. The second edition was published in 1953.

The research in the field of physiology has been tremendous since the second edition of the book was published. In this, the third edition, Adler has made a very careful evaluation of the work done since that time. This has meant extensive revision of some portions of the book, as, for example, the chapters on aqueous humor and intraocular pressure. The chapter on ocular muscles has been entirely rewritten. This chapter also contains eight pages on the electromyography of the ocular muscles. All the recent advances in physiology of the eye as based on both laboratory findings and clinical observation have been incorporated in this new edition.

The book contains 56 more pages than the previous edition and has 43 more illustrations and is beautifully and instructively illustrated. There are excellent key references at the end of each chapter. The format, paper and illustrations leave nothing to be desired. There is an excellent 10-page index.

This newly revised and partly rewritten edition is a must for every ophthalmologist who is attempting to keep abreast with the rapidly changing concepts of the physiology of the eye. These changes are important factors in the better clinical care of the diseases of the eye.

FREDERICK C. CORDES, M.D.

CLINICAL AUSCULTATION OF THE HEART—Second Edition—Samuel A. Levine, M.D., Sc. D. (Hon.), F.A.C.P., Clinical Professor of Medicine, Emeritus Harvard Medical School; Consultant in Cardiology, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton-Wellesley Hospital; Physician, New England Baptist Hospital; and W. Proctor Harvey, M.D., Associate Professor of Medicine, Georgetown University School of Medicine and Director, Division of Cardiology, Georgetown University Hospital; Consultant in Cardiology, Walter Reed Army Medical Center, Bethesda Naval Hospital. W. B. Saunders Company, Philadelphia, 1959. 657 pages, 660 illustrations. \$11.00.

One is first impressed with the size of this volume. There are 657 pages and it is more than twice the size of the first edition published ten years ago. All of this is an indication that the old art of auscultation has advanced along with newer and more complicated methods for the study of heart diseases. Much of its growth is due to new material about congenital heart disease but there is also much new material in all fields.

The authors have followed the plan and purpose of the first edition. It is, as the title states, a book concerned with clinical auscultation of the heart, not a book about phonocardiography. Auscultatory findings are described and illustrated with phonocardiograms. With the description there is also an account of measures which help in eliciting certain physicial findings. These descriptions, which must for the most part come from the lifetime experience of the senior author, and especially from his interest in physical examination of the heart, are one of the valuable features of the text. The reader, if he has not previously done so, will find phonocardiograms easy to interpret as illustrations of sounds and murmurs, and ideally suited for this purpose.

The volume is well arranged with chapters on the heart sounds, arrhythmias and cardiac murmurs. There is a final chapter on miscellaneous auscultatory findings which includes topics which do not fit into the previous chapters, as well as some examples of bizarre sounds and murmurs. The index, with a few trials, seemed awkward to use, but there is a simple, well arranged table of contents which will almost always lead one at once to the desired subject.

No grounds were discovered for serious criticism of any part of the book. Everything of importance in the field of auscultation seems to have been included. Perhaps the reader would benefit from a more critical discussion of the origin of the heart sounds. Most of the illustrations are excellent but a few have been reduced in size in the process of reproduction to the point where they are almost unreadable. One might also wish to read more about the phonocardiograph and its uses. Probably its most valuable use is the use the authors have made of it, but phonocardiography has come of age, and there are some situations where it can give more important information than more complicated methods of diagnostic study. One also hopes that the authors in planning for the next edition will consider extending the scope of the book to include illustrations of the other simple methods of cardiac examination, inspection and palpation, with graphic records of the venous pulse and movements of the precordium.

Everyone interested in examinations of the heart will find something useful in this book. The medical student, once he has made a beginning in the art of auscultation, will profit by referring to it for additional information on specific topics, and the accomplished cardiologist is quite certain to discover new information.

JOHN K. LEWIS, M.D.

JOHN K. LEWIS, M.L

ANESTHESIA FOR INFANTS AND CHILDREN—Robert M. Smith, M.D., Anesthesiologist, The Children's Medical Center, Boston, Mass.; Assistant Clinical Professor of Anesthesia, Harvard Medical School; Consultant in Anesthesia, U. S. Naval Hospital, Chelsea, Mass., and Lemuel Shattuck Hospital, Jamaica Plain, Mass. Foreword by Robert E. Gross, M.D. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo., 1959. 418 pages, with 182 illustrations, \$12.00.

This is an excellent, conservative treatise which covers the field of pediatric anesthesia in a concise lucid manner.

Essential physiology and pathological processes with the differences between infants and adults are clearly and logically described. Equipment and choice of anesthetic agents and methods are presented in detail for the entire field of pediatric anesthesia as are preoperative preparation, fluid therapy and blood replacement.

The entire book is well organized and can be recommended to all interested in the surgical care of infants and children. It should be required reading for all residents in anesthesiology and of value to all anesthesiologists not specializing in pediatric anesthesia.

CHARLES F. McCuskey, M.D.